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Revolutions in the Light of Historical Process*

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ABSTRACT

Although there occurred numerous revolutions in the ancient world and in the Middle Ages, their historical role was relatively small. Starting from the Modern period, the role of revolutions as historical engines increased dramatically, which was connected with the started industrial era and emerging technologies, with development of capitalist relations, to which the revolutions opened the way in the struggle against absolutism and obsolete social relations. The article considers the role of revolutions in the long-term historical process and the World-System's development as well as analyzes the changing importance of revolutions from ancient times to the present day. The author shows why the nature of revolutions has changed and their significance has sharply increased since the beginning of the sixteenth century, that is with the started Early Modern period and the Industrial revolution. The author also explains how and why the role of revolutions as the most important driving force of historical process and progress started to decline against the background of the increasing role of more legitimate and less expensive forms of societal transformations. The contemporary role of revolutions and their usage as a geopolitical weapon are also examined. The author also defines the correlation between developing technologies, globalization, and the role of revolution in historical process. While considering these aspects he also addresses some points related to the theory of revolution and makes some predictions regarding the future role of revolutions for the development of societies and the World-System in general.

ON ANCIENT AND CONTEMPORARY REVOLUTIONS

In the political history of complex human societies, revolutions have been observed for many centuries. But only starting from the early modern period have revolutions become one of the major driving forces of histor-

ical progress, leading to novel regime types and reshaping international power relations.

Revolutions can be (and should be) considered within several approaches:

1) Within the systemic approach revolutions are considered as a serious imbalance which may emerge when a system shifts from a relatively stable state into unstable due to huge disproportions in societal development. The system enters the crisis period while revolutions turn one of the forms of crisis resolution. This approach is most frequently applied.¹

2) Within the sociological approach revolutions are seldom considered as historical phenomena while the major focus is put on their recurrent features. This approach is also widely employed.

However, revolutions can hardly be treated only within the frameworks of systemic or sociological approaches when a society is considered mostly as a self-sufficient system. One should consider it within a wider context. And for this purpose we may use the following approaches.

3) The World-System approach considers revolutions at the background of the World-System changes as well as the impact of the World-System changes on revolutions and vice versa the impact of revolutions on transformations and reconfigurations of the World System.

4) The world-historical approach treats revolutions as phenomena whose role as an instrument of progress considerably changes in the course of unfolding historical process.

Unfortunately, the investigators less frequently apply the last two approaches. So in the present article we will pay particular attention to them. It is also obvious that the defined approaches can be combined.

5) It is also worth analyzing revolutions with respect to other societal changes, in particular, those leading to similar results. However, only a few investigators of revolutions systemically consider the place of revolutions among other forms of transformation of a society and means of resolution of social and political contradictions especially within the historical process frames. Among those who performed it with unfailing systematically one can name Shmuel Eisenstadt and also to a certain extent, Samuel Huntington, Jack Goldstone, and Charles Tilly (Eisenstadt 1978; Huntington 1968, 1991, 1996; Goldstone 1991; Tilly 1992). In the present article we will also discuss why and how the role of revolutions in historical process change in comparison with other protest forms and social conflicts and processes changing a society and its development.

Here we analyze the transformations of revolutions within historical and globalization processes and in connection with the World-System's transformations. In the last section we show the correlation between development of technologies, globalization, and the role of revolution in historical process.

In conclusion we also offer some forecasts regarding the future role of revolutions in the development of societies and the World System in general.

It is sometimes argued that there had occurred no revolutions prior to the Modern era (*e.g.*, Ellul 1971), but of course, it is far from true. If one considers revolutions as a violent change of regime, he may say that they have accompanied political history for many millennia. But such revolutions were mainly characteristic for the polis-type states whose regimes could alternate from oligarchic (or tyrannical) to democratic and vice versa. Thus, prior to the early modern period the revolutions mostly occurred in the states whose political regimes were less widespread during the pre-industrial period. In a revolutionary perspective the history of some Hellenistic states and Rome may be also presented as a struggle between social and political groups for the distribution of resources and power (see, *e.g.*, Sorokin 1992, 1994; Hansen 1989; Cartledge 1998; Grinin 2004). We may define some phenomena resembling political and social revolutions in the medieval states (in Italy and some other countries). Social struggle is also observed in the history of some Eastern states. But these attempts to establish a new regime and, figuratively speaking, change 'constitution', were quite rare; yet, sometimes one observes a kind of social revolution when socio-economic (distributive) relations are changed.² However, there did occur devastating uprisings, sometimes sweeping away the dynasties, as it happened in China.³

However, despite the abovementioned examples, in ancient times and medieval period there were no revolutions that could promote a societal advance to a higher stage of social evolution. No doubt, revolutions used to be a developmental factor but obviously less important than wars and other transformations. The societies' productive basis would remain the same after revolutions, thus, the progressive effect of the latter was much weaker than in the Modern era.

Only starting from the Modern period the revolutions became one of the leading driving forces of historical process (see Grinin 1997; Semyonov *et al.* 2007; Travin and Morgania 2004; Goldstone 2014). Why did it happen? The reason is the transition to a new – industrial – production principle which started in the late fifteenth century (for more details see Grinin 2006; Grinin L. and Grinin A. 2015; Grinin, Korotayev 2015; see the Table below) for the correlation between the stages of technological development and the role of revolution). Along with a breakthrough in production it was necessary to transform all other relations, so that a society could create abundant space for the development of new productive forces. Meanwhile, revolutions could help eliminate the relations hampering that development. Thus, we mostly speak about revolutions of a new type, which were practically unknown in the history prior to the sixteenth century. We describe them as a phenomenon that turned extremely important for the unfolding historical process and as a means of realizing the society's pro-

gressive development, raising its economic, cultural, political, and legal level.⁴ In other words, here we treat revolutions not just as a means to change political regime or as a way of conflict resolution in societies but as a transformation which eventually took a temporal lead in terms of technological, cultural and political development and which would drive ahead not only a certain society but the whole World System.⁵

Starting from the Modern era one can speak about a peculiar role of revolutions in the development of historical process, the role of 'a locomotive of history' (according to Marx 1964); yet, as we will show, this role started to decline and change already in the mid-nineteenth century. For Shmuel Eisenstadt (1978) the revolutions of the early Modern era are modern revolutions. However, he notes that many scholars ignore the relation between revolution and modernity. And those who acknowledge that the main structural and institutional features of revolutions are inherent to the Modern era still fail to trace the relation between these features and fundamental characteristics of modernity. Samuel Huntington also argues that revolutions can hardly outbreak in traditional societies with a low level of social and economic complexity. It is a phenomenon of a modernizing society (Huntington 1968).

Finally, we should note that the increasing role of revolutions in historical process was associated not only with general technological transformations clearly manifested from the last third of the fifteenth century (see Grinin 2006; Grinin L. and Grinin A. 2015; Grinin and Korotayev 2015), but also with the concurrent breakthrough in information technologies. Any great revolution or a new wave of revolutions is somehow connected with emerging principally new media or with their improvement. In what follows (in the second section), we try to trace this trajectory of revolutionary practices.

Before proceeding to the next section we would like to make one more remark. Although the starting point of globalization has been long debated (see Grinin 2011b; Grinin and Korotayev 2014, 2018) still nobody denies that the beginning of the Age of Discovery (between the late fifteenth and early sixteenth centuries) was a landmark for the history of globalization. However, it is not coincidence that almost at the same period the history of modern revolutions also starts. We mean the start of the Reformation in Germany and its 500th anniversary was marked in 2017. Just from this time one can mark off modern revolutions in Europe and in the world (about the Reformation in Germany as the first revolution, the Reformation in Europe and the first waves of revolutions as well as about differences between revolutions of the modern period and earlier ones; see also Grinin 2017b).

THE ROLE OF REVOLUTIONS FOR THE DEVELOPMENT OF SOCIAL SYSTEM AND WORLD SYSTEM

Revolutions as a means to change a society's social-political structure under the conditions of capitalist and industrial production

As we mentioned, although the history of some ancient and medieval societies can be described in revolutionary terms as a struggle between social and political groups, it is only after the coming of the Modern era that revolutions became one of the leading driving force of historical process. And as already pointed, this happened mostly because the European countries entered a new – industrial – production principle (see Grinin L. and Grinin A. 2015, 2016b) which provoked the necessity to transform other societal sub-systems. This process is generally also connected with the early type of modernization.⁸

Thus, revolutions are the result of transition of societies and in general, of historical development to the path of a consistent economic growth and respective changes in relations and institutions. *Therefore, revolutions appear to be a search for the ways to provide societies' continuous development while a society is yet unaware that a constant growth is not occasional and abnormal but a necessary prerequisite for the existence of modern society. Revolution is one of the means to provide broad expense for constant change in society and for its existence under these changes.*

As a result, the criteria of successful societies within historical process started to change. If to follow the common developmental logic of historical process, at its origin one may trace a search for opportunities to transform local relatively small societies/polities into larger entities: states and later empires. To create sustainable political entities there were needed powerful and stable institutions which were to be gradually established. We also observe a number of centralization/decentralization cycles combined with the search for mechanisms and institutions to consolidate societies (Frank and Gills 1993; Chase-Dunn and Hall 1997; Chase-Dunn *et al.* 2010; Grinin 2008, 2011a).

In Europe these institutions developed into legitimate and sacralized monarchy (which needed much time to create the rules of inheritance), national states, social class or other forms of structured social order (Grinin 2008, 2012a). Thus, historical process 'operated' in order to establish strong institutions that could maintain social stability under any perturbations along with states' constant external activity. This was also supported by quite conservative, archaic and far from constantly changing industrial and technological (as well as social) foundations of society (since the peasantry constituted the major part of population and the cultural level remained archaic with low literacy level). But with the change of productive and technological basis, the strong and sometimes too strong societal bonds (*e.g.*, a particular dynasty's imperial power used to be the most important bond for a multinational state) would gradually turn an obstacle for the advance in a society which at that point considered industry and trade as the most important means to solve financial and other problems and that had both to endure and develop them under conditions of international rivalry as well as to take care of the means of communication, edu-

cation, *etc.* Hence, the major and most important achievements in historical progress (a well-organized autocracy, an absolute monarchy and strong state-controlled estates, a clear social hierarchy, totalitarian religion and others) suddenly started to hamper development and progress, the idea of which began to form and strengthen. At the same time, liberalization and humanization of relations took place – from absolute monarchy to absolute *enlightened* monarchy. These humanized relations prevented repressiveness and became an important factor for activating revolutions (see below).

Thus, the former institutions, including absolute monarchy and in many respects the self-sustainable aristocracy (along with the church and estate structure which became state-sanctioned) became a brake for progress since the model of existence and functioning had changed from a conservative to a dynamic one. And as it has already been mentioned, since those were very strong and powerful institutions and there were no other tools to affect them (and no suitable historical experience) the revolutions appeared to be the only way to destroy these institutions.

As already pointed, revolutions of the modern type occur at a certain stage when development becomes impeded by rigid obstacles and institutions. And these may include not only absolute monarchy, aristocracy or large feudal landholding but also rigid institutions of exploitation. Moreover, if the exploited class grows rapidly in quantitative and qualitative terms as it was with the working class in the nineteenth and twentieth centuries, it is clear that the proletariat's struggle for rights and guarantees might become a part of revolutionary movement and at certain stages even its major constituent (as it happened in July 1848 and in 1871 in Paris). Only the adoption of relevant legislation and establishment of a more flexible system allowed eliminating the threat of proletarian revolution. To a greater extent this also refers to growing national self-consciousness of the peoples deprived of statehood and lacking at least autonomy. National oppression and the legislation fixing inequality of peoples, languages, national religions, *etc.*, form strict relations which can be hardly changed (moreover, the state's purposeful policy can strengthen them). Thus, nationalist revolutions as a means to change situation are quite characteristic of the nineteenth and twentieth centuries (see Gellner 1983). Revolutions in the Austrian Empire in 1848–1849 and 1918–1919 were in many respects caused by dissatisfaction with national relations. Even in Britain which seemed to have gone through the revolutionary stage, a revolution (revolt) would break out in Ireland in 1916 precisely because of the failed resolution of the Irish self-determination problem.

Thus, *revolutions generally provide an opportunity to forcibly change the situation when certain forces (along with their self-consciousness) grow in the presence of rigid institutions and relations (also includ-*

ing the consciousness of the authorities and protecting them elites), which hinder the further growth and self-determination of those forces. Revolutionary conflicts may break out in different spheres including political, national, social and even religious ones.

Revolution as a means of mutual influence between societies and the World System

Revolutions cannot be explained only within the systemic-approach framework via the analysis of a society as a self-sustaining system. One needs a different approach like the world-system one. Many studies show the importance of accounting the international factor for the understanding both of the causes of revolutions and their success/failure (in theoretical terms and with respect to certain revolutions) (*e.g.*, Skocpol 1979; Skocpol and Trimberger 1994; Wickham-Crowley 1992; Halliday 1999; Snyder 1999; Pastor 2001; Goldstone 1986, 2001, 2014, *etc.*; see also Sanderson 2005). We also find quite challenging the idea about a permissive or favorable global context for revolutions (*e.g.*, Goldfrank 1979; Goodwin and Skopol 1989; Wickham-Crowley 1992). Many researches deal with ideological impact of foreign ideas and movements, as well as when the content of revolutionary movements in one nation influences others (Arjomand 1992; Colburn 1994; Katz 1997; Halliday 1999; see also Johnson 1993; Katz 1997; Boswell and Chase-Dunn 2000).⁹

Nevertheless, in our opinion, there are few full-scale studies of the impact of the world-system factor on different aspects of revolutions and revolutionary waves.

Along with wars, long cycles of political hegemony and other phenomena, revolutions can be treated as a means of the World-system's impact on particular societies and vice versa as a means of transformation or even re-configuration of the World System itself and transition to a new world order.

Let us apply the World-System approach to define some peculiarities of revolutions in the countries of the World System semi-periphery and periphery. The matter is that the revolutionary impact penetrating from the more developed countries of the World System to its less developed ones, can make the revolutionary traits considerably vary in the developed and less developed countries.

Besides, by the time when revolutions started in the World-System semi-peripheral and peripheral countries, that is by the early twentieth century, revolutions in a number of advanced societies seem to be an outdated means of social development and conflict resolution and they were replaced by more civilized forms (see below).¹⁰ Thus, the World System core tried to advance via various smoother ways. However, in the twentieth century a great number of revolutions broke out far from the core: in the semi-periphery and periphery (see Grinin 2018b; see also Sanderson

2016: 74–77). Thus, *for the semi-peripheral and peripheral countries that strive to catch up the advanced ones, revolutions start to be a pusher*, yet, the characteristics of revolutions could considerably vary along with the opportunities they provided to draw a revolutionary society to a more advanced developmental trajectory. That is why in many societies revolutions preserved their relevance. This primarily refers to those societies that grew to the level when revolutions became generally possible while the political system did not keep up with the times. As a result these quickly developing countries experienced a revolutionary collapse (as it happened in China). This also fully refers to national-liberation revolutions which mostly occurred when semi-peripheral and peripheral countries developed to the level to claim their sovereignty.

In fact, the transition to a required persistent development (as well as to the idea of indispensable modernization) would hardly spread in many societies, were it not for the international military and political rivalry and economic superiority of other countries as its inevitable consequence. Since the military capabilities depended on technologies (gunpowder revolutions, shipping, routes of communication, infrastructure, *etc.*), the need for military and economic modernization became a dire necessity. The financial costs of such military modernization forced to search for resources in the development of trade and industry, improvement of education, *etc.* Hence, the role of the external factor became crucial. Other achievements, including in medical, scientific spheres, *etc.* should be also borrowed.

In the first case, modernization needed to borrow knowledge and education system, which together could trigger cultural borrowings as well. However, the cultural borrowings would sooner or later lead to import of revolutionary ideologies. As a result, in the catching-up countries they started to consider the Western-model revolutions (similar to democracy afterward) as a certain universal and progressive means to achieve a new level.

The World System's structure affects different countries in various ways depending on their functional position. The penetration of new ideologies to dependent countries also creates some new situations there. Besides since development constantly proceeded in all societies, yet being more intensive in the World-System core, there is an evident aspiration of societies lagging behind the core to catch up with it (yet only few of them would finally succeed). However, this race creates prerequisites for recurrent revolutions in catching up countries, especially if the latter fail to establish institutions capable of peaceful transformation of the society.

The emerging gap between ideologies and opportunities of a particular society increases tension and revolutionary sentiments. Finally, this may lead to a kind of frustration and evaluation of one's own political regime and relations as backward, useless and demanding a breakup; and consequently, this raises tensions and revolutionary sentiments caused

by propaganda. There is also an international, albeit small, but active social group of revolutionary ideologists. The ongoing modernization reinforces the impact of new ideologies in these societies. Hence there emerge revolutionary internationalism and universal revolutionary ideology.

In other words, revolutions quite often occur in societies that hardly objectively achieve the level when revolutions become inevitable; but since certain social groups are formed due to revolutionary ideologies and practices borrowed from more advanced societies, the social protests and discontent are canalized in an objectively higher social form than they should be.

In brief, the world-system effect allows revolutions to engage peripheral countries which are not objectively ready for such pattern of advancement. The situation seems similar to the one when economic crisis are transmitted to industrial economies of peripheral countries while the latter are still too weak and would hardly reach the crisis level on their own. Thus, revolutions may occur in societies with weak or absolutely absent social basis for their outbreak. And in the course or after revolution such societies may be thrown back since the attempts to introduce the new-level relations fail and the relations inherent for these societies are somehow restored (which can be manifested in decentralization, bloody dictatorships and modification of archaic relations). In our opinion, many revolutions in the East and other peripheral regions starting from the early twentieth century as well as many communist revolutions can be attributed to this type.

Thus, it appears that since ideologies can be borrowed (or deliberately imposed from outside with the purpose of preparing revolution) there emerge revolutionary internationalism and revolutionary ideology which become universal for the World System or its parts.

The wider revolutions spread in the periphery the stronger is their destructive effect and negative consequences.

And one more important remark. If there emerge centers of revolutionary transformations that consider revolutions in other countries to be their most important objective, the possibilities of revolutionary outbreaks and their success significantly increase. In many respects this is the result of implementation of specific technologies which take into account preparation of revolutionaries, *etc.* The USSR remained such a center for a long time, and in recent decades the USA have become a center of the so-called 'color revolutions' (certainly there also existed and exist smaller centers, *e.g.*, those inspiring Islamic revolutions). Besides, the dominating revolutionary ideologies along with propaganda proclaiming revolutions fair and progressive substantially weaken the authorities' and regimes' efficiency to resist them.

We must also add that in the recent two decades the constant pressure of the part of the core that demands democratic changes provides strong pressure on the ruling elite in these countries and a powerful support for those forces seeking for forcible changes. Thus, we observe a *new wave*

of revolutions (in the early twenty-first century) caused by the fact that the core societies stimulate the semi-peripheral societies' transformations.

Thus, the world-system effect enlarges the scope of revolutions in the world and involves societies that are immature or not fully prepared for revolutions, and increases the chances of their success. To a certain extent, it is just the world-system effect that makes revolutions remain the means of social transformations.

THE CHANGING ROLE OF REVOLUTIONS IN HISTORICAL PROCESS

In this section we will try to combine considerations of revolutions within two approaches, namely, of historical process and the World-System one.

The role of revolutions prior to the Modern Era

A society, especially the modernizing one, is a self-developing system which is destined to go through crises from time to time. One should note that these crises result from a long-term growth. Therefore, crises emerge in any societies experiencing a rapid growth. But the manifestations of crises can vary. For example, in the early medieval period the rapid economic and socio-cultural development of territories of barbarian kingdoms led to the decentralization crisis of archaic monarchy, while a rapid territorial growth of the Roman Republic led to civil war and change of political regime.

In the millennial history there were many cases of state crisis associated with different factors (Eisenstadt 1978; Chase-Dunn and Hall 1997; Grinin 2010, 2011a, 2012c). Respectively, one can observe greatly varying sorts of crisis and resolution of contradictions in societies prior to the Modern era, including revolts and rebellions, plots and coups d'état, external and civil wars, repressions and deportations, relocations and colonies exit and many others. As already said, revolutions may be also attributed to this list but mainly in a definite type of societies and in general they were far a less frequent form in comparison with others. Among the transforming means to solve objective tasks of strengthening and development of a society the reforms and large activities (like a construction of irrigation facilities) are most often applied. Also there were conducted measures to unify the management of the conquered lands (this was the case with emerging large empires). They were usually performed by a state under the initiative and guidance of vigorous politicians. Not only in monarchies and tyrannies, but often in republics as well such reforms were conducted by rather violent means. Sometimes one observes reformers (like Solon in Athens) who created new legal or other systems. There were also religious reformers (like Akhenaten in Egypt or Ashoka in India). *In historical process revolutions were just as an additional means*

of societal development and could hardly push a society to a new developmental stage.

The role of revolutions in the Modern era prior to the mid-nineteenth century. The changing role of revolutions for the World System core

Revolutions are a tool to change society and its political and social order. The main difference between political crises and anti-governmental actions of the early modern period and the revolts in the late-agrarian societies consists in the aspiration to spread the action nationwide, to give it a prominent ideological character, and the most vivid difference is the goal to substitute the existing regime for a new public authority of national scale. Herewith, the upper urban strata, including the counter-elite and some of the elite ousted from power, form the core and the primary force of such a movement. But all these strata are united by a *new ideology*.

Until the mid-nineteenth century, revolutions occurred primarily in the countries advanced in terms of a new production principle, that is with developing early industrialization and capitalist entrepreneurship (see Grinin L. and Grinin A. 2015, 2016; Grinin and Korotayev 2015). Here one can name early sixteenth-century Germany, the Netherlands in the late sixteenth century, and England in the seventeenth century. Thus, these early revolutions, especially in the Netherlands and Britain, opened new paths and huge perspectives both for these countries and for other European countries and their colonies, including the American colonies. As for the Reformation, based on the early urbanized and early bourgeois societies, in a number of the European countries it opened the way to strengthen and institutionalize that 'spirit of capitalism' which Max Weber (1930 [1904]) spoke about.

It is worth noting that revolutions in this period (especially in the seventeenth century) were a rare case, actually an exception. The main forms of protests, along with peaceful and legal actions, were revolts and insurrections. The leading forms of societal transformations were reforms and forced transformations caused by the efforts to enhance the military and financial situation in a state and also to strengthen the estates' rights. The main forms of political transformations were conspiracies, coups d'état, small and large civil wars and also external wars which seemed almost endless. *But the role of occasional revolutions in opening the new paths for advancement and for the World System increased immensely.*

Besides, the revolutions considerably changed the balance of power in the World System. So when Fernand Braudel (1985) and Giovanni Arrighi (1994) speak about the change of leaders during of long cycles of capital accumulation and hegemonic transitions of the Modern era (in particular, about the transition from the Genoese to the Dutch cycle

of Accumulation and later to the British one) then the roots of this transition originated to the consequences of these revolutions.

In the late eighteenth century there occurred two large revolutions: the American and French. While the American Revolution can undoubtedly be considered as a powerful drive of advance, the progressive role of the French revolution immediately became the matter of fierce debates. In the mid-nineteenth century this was already pointed by Alexis de Tocqueville who analyzed the 'old' regime, that is, the pre-revolutionary (prior to 1789) one in France. He concluded that 'the Revolution effected suddenly, by a convulsive and sudden effort, without transition, precautions, or pity, what would have been gradually affected by time had it never occurred' (Tocqueville 2010 [1856]: 36–37).

But this referred only to the development of France. The French Revolution despite all its high costs (including millions of lives lost during the Napoleonic wars) undoubtedly gave a significant impetus to transformations not only in France but also in Europe and in the whole world. As we pointed elsewhere (Grinin 2017a, 2017b, 2018a) great revolutions may divert and even throw back the society that generated them, and still they realize the aspirations for certain changes, transformations and needs (although this is conducted in a distorted ideological way). Meanwhile, the neighboring societies can benefit from such development since they can conduct appropriate changes under the influence of revolutionary events. In other words, it is a way to implement the historical process in which some societies' progress can be achieved at the expense of the others' failure.

The revolutions of the 1830s and 1848–1849 in Europe expanded developmental opportunities for national states and opened a wide path for the European democracy and completion of industrialization in many European states.

One may draw a conclusion that revolutions of the late eighteenth and first half of the nineteenth century occurred not in the economically leading countries but in those that were just close to the most developed countries. As a result, the role of revolutions in the nineteenth century changed in a way.¹¹ Although they still preserved a significant progressive meaning, they failed to open any different developmental ways but instead would *create alternatives (as in the USA and Germany) and extended the World-System core.*¹²

The Declining progressive role of revolutions in the World-System core and their substitution for reforms

In the period following the revolutions of 1848–1849 there were quite a few revolutions in Europe. The revolutionary epoch in Spain and France was still on the way and also the Civil War continued in the USA. But there was nothing similar to the wave of 1848–1849 until the start of the revolutionary wave associated with World War I (below we will show

that in terms of historical process the character of those revolutions was already different). However, the European countries developed rather rapidly also in terms of expanding freedoms and improving quality of life. This was connected in many ways with the fact that revolutionary experiments obviously cost too much and the revolutionary 'bitter pill' turned out to be too strong and dangerous. So the societies that had experienced revolutions and had burning memories were eager to conduct preventive reforms. This contributed to the historical lessons learned by the elites and states along with their developed sense of self-preservation, and new institutions established as a result of previous fights and development (in particular, local governments, constitutional monarchies, parliaments, new proceedings, the system of political parties and professional associations). Conscious reforming which if successful could reduce social tension, and what is more important, open horizons for society's development for decades. Reforms could also come at a price but still they turn far less costly than revolutions. All these led to the fact that in a number of societies revolutions became an outdated means of social transformations.¹³ Gradually and far from easily did they become associated with a definite historical stage of societal development. But this occurred only in some societies, which had recovered from revolutions and approached the leading societies (the World System core including the English dominions like Canada, Australia, and New Zealand).

On the one hand, this has generally decreased the role of revolutions as driving forces of historical process in the World-System framework since its core would now advance via different and smoother ways.

The increasing role of revolutions in the World-System semi-periphery and periphery. Revolutions as a result of the World System's transformations in the first half of the twentieth century

Thus, the World-System's most developed countries diverged from revolutions to the advantage of preventive reforms. However, in certain circumstances, revolutions still remained relevant. This primarily refers to those societies that achieved the level when revolutions became possible, yet their political system did not change in tune with the epoch. This means, that societies start to develop quicker in certain spheres (especially in production, communication means and transport, culture, and demography) than their social-political structures allow. The more explosive is development and growth the more severe appears the crisis caused by such development.

If we consider the general range of revolutions starting from the Modern period, it becomes clear that such events are associated with *a definite stage of societal development*. Revolutions can hardly occur in the society at any period of its history (Huntington 1968). Thus, a society should come up to a revolution.

However, the success of a revolution in terms of its further progressive role largely depends on the correlation between a society's actual readiness to transformations which are proclaimed as the goals of revolution and these goals as such. The large discrepancies between revolutionary slogans and actual opportunities can be revealed in any revolution.¹⁴ But the more the revolutionary slogans and ideas are borrowed from the outside, the less understandable is the meaning of revolutionary ideas for social forces and the larger is the defined gap. Also the more the revolutionary objectives diverge with a society's readiness to follow them the stronger is the possibility that the progressive outcomes of the revolution would be minimal or negative. This especially refers to democratic ideals in the societies lacking respective experience. That is why it is the possible introduction of a stable democracy that revolutions often fail to accomplish. Meanwhile, the national-liberal struggle and endeavors to establish an independent state more often succeed with revolutions. The communist ideals fail during revolutions in the countries where private property relations and religion are strong (as it occurred in Afghanistan after 1978); on the contrary, the communist relations can be established in the societies where the private property positions are weak with a strong role of a state. The society's unpreparedness to realize revolutionary goals may help explain why the progressive role of revolutions in the World-System semi-periphery and periphery considerably declined in comparison with its role in the world-system core in the previous periods.

The societies of the World-System near and far semi-periphery were getting mature during the second half of the nineteenth century (and specially the last third) which as we already told, was of less revolutionary character than its first half. But when those semi-periphery societies rose in economic, political and cultural terms, the revolution became there a powerful alternative to reforms. And with account that their elite was insufficiently ready for a revolutionary rise while their intelligentsia took the model from the European countries, a number of countries were captured with revolutions in the early twentieth century. So the first revolutionary wave of the twentieth century started to involve Russia, Turkey, Persia, China and Mexico.

Yet, one should note that social systems in these countries did not intrinsically come up to the level when revolutions may appear an efficient and, what is more important, final resolution of internal problems. Under previous regimes they had hardly exhausted their reform resources. As a result, these rapidly developing societies experienced a revolutionary collapse, often accompanied with the split of the state and an epoch of severe internal conflicts (the most vivid example here is China). This was exacerbated by the revolutionaries' ultimate goal of creating a democratic society which these countries were not ready for.

The role of these revolutions in historical terms was associated with dragging semi-periphery and a part of periphery to the World-System core and search for new developmental paths (among which communism would later show up). But this catching up was rather rigorous. So the revolutions appeared devastating and leading to civil wars and severe hardships.

The First World War opened a very hard period of the World-System transformation (and change of its leader) which mostly completed only by the mid-twentieth century. To a certain extent the revolutions of 1917–1923 and following events *could be considered as related to those World-System transformations*. During the same period many revolutions took place and also other events that were equal to revolutions in their significance and were connected with military turnovers, dictatorships, peaceful but very profound and violent changes in different countries including those close to the World-System core or those constituting this core (Germany, Austria, and Italy). These changes far from always proceeded as revolutions so we consider them as analogues of revolutions (here we attribute the Nazis seizure of power in Germany and the changes conducted in the country and neighboring states).

After their completion, many revolutions of the 1900–1930s (with a few exception including Mexico¹⁵) generally failed to become a means of progress which could be considered as an evident advantage over the previous development. This does not mean that they had not any positive impact, but the cost was too high. And the transition of Germany to the right-wing national-socialist revolution had huge negative consequences.

Revolutions of the second half of the twentieth century and early twenty-first century

Revolutions of the 1940–1970s had two major aspects. First, these were revolutions of the remotest periphery and opened the way to the emergence of new states in Asia, Africa and others regions. These countries' further development proceeded mostly far from smoothly. However, with the emergence of new states in the 1940–1970s the number of military coups in the world increased by ten folds which became for many countries the main form of changing policy and regimes. Just a small number of these turnovers can be considered as analogues of revolutions.

Let us also point that countries that became independent as a result of severe wars with metropolises got no evident advantages in comparison with the countries that obtained independence after agreements with metropolises or which the latter set free of their own free will.

The second aspect was connected with the struggle between super-powers (the USA and the USSR) for the global leadership and respectively and associated communist revolutions and anti-communist actions (like military turnovers or civil wars). Let us note that communist revolutions, especially in Europe, mostly exhausted their progressive potential and their

ideas mainly effected the mitigation of social policy in other countries. This was also connected with the fact that such revolutions became a geopolitical weapon which mostly solved not national tasks but served the interests of the communist superpowers (the USSR and Maoist China).

Thus, numerous revolutions and their analogues in the 1940–1970s undoubtedly considerably contributed to the change of the World-System's near and far semi-periphery and periphery and promoted the emergence of a new state. But on the whole, the progressive potential of revolutions was rather limited and can be hardly compared with the role of revolutions in the seventeenth – nineteenth century.

The wave of anti-communist revolutions brought a number of East European countries back to the developmental mainstream. Their advantage consisted in the fact that most of them were 'velvet' and bloodless. Concerning the revolutionary waves of the twenty-first century, they included revolutions which were mostly used as a geopolitical weapon and served the interests of superpowers and not of the societies. And this considerably undermines their progressive potential. And in those cases when they were mostly caused by internal problems, as it was in Egypt, still they did not show up their advantage in comparison with modernization imposed by the authoritarian regimes. On the contrary, most of the contemporary revolutions can hardly be considered as a progressive impetus (Ukraine, Egypt, Tunisia are vivid examples here), besides they do cause international crises (as in Ukraine, Syria, and Yemen). Quite often revolutions provoke a return to the former authoritarian model and as a result almost everything returns to the state as it was before revolution (as in Egypt after the military takeover in July 2013). Moreover, the prospects of success of a revolution (again in terms of improving life and especially in eliminating the roots that cause it) are not guaranteed and sometimes are very modest, indeed. And we should repeat again, there is a high probability that everything will be back in its place.

We have already compared the cost of revolutions and reforms. Now the balance has considerably shifted in favor of the latter. That is why today one can hardly estimate numerous revolutions (especially in societies which are not ready for democracy) in positive terms since their value and especially the risk of bringing a society to a wrong path (as it happened in 1979 in Iran) significantly exceeds potential progress. In other words, the same results (*i.e.*, the improvement of the quality of life and modernization of society) can eventually be achieved at a more peaceful pace, albeit at the cost of preserving an immoral regime but without social upheavals.

Thus, we can make a conclusion that in the course of historical process the role of revolutions as a means of advancing societies and the World System and as a driving force of progress opening new developmental perspectives has changed. It increased starting from the sixteenth

century, reached its apogee in the seventeenth century, remained high over the eighteenth and nineteenth centuries and then its role as a driver of the World-System progress generally began to decline; yet, its role as a means of the World-System transformation increased. In recent decades, the role of revolutions as a geopolitical weapon to increase the superpowers' influence has considerably increased.

CONCLUSION. THE ROLE OF REVOLUTIONS IN THE FUTURE

An important point related to the world-historical aspect of the impact of great revolutions is the emergence of new trajectories of historical development. The emergence of a new developmental trajectory provides new opportunities and increases competition along with simultaneous divergence and convergence. However, in this respect the role of revolutions in historical process decreases and after the 1940s there have hardly occurred any great or just large-scale revolutions that could change the global developmental trajectory. And this is good indeed since great revolutions bring great upheavals and sacrifices while the same transformations can be achieved by more balanced means.

Therefore, we notice the changing role of revolutions as a means of social advance in historical process. They used to be the means of social and political transformations that opened new horizons for historical process in general, but today they have become a geopolitical means of increasing impact of certain forces and regimes or of imposing certain political forms. Moreover, instead of the means to generate modernization the revolutions turned the upheavals bringing societies to stagnation and degradation.

With respect to the subject of the present volume, one can hardly argue that the decreasing role of revolutions in historical process (as paving the way for new levels and trajectories) as a trend observed over several decades of the twentieth and twenty-first centuries will certainly continue.

However, their importance for the World-System, as we pointed above, remains rather significant. Speaking about the future of revolutions it seems obviously that

1) Revolutions as a means of modernization will still play their part in currently underdeveloped countries but this role will decrease due to the world community's impact and accumulation of historical experience as well as due to the development of alternative modernization patterns.

2) Revolutions as a means of democratization of authoritarian societies and non-consolidated democracy. Revolutions may generate new developmental alternatives within individual societies. But it is important that chances that such new alternatives will be better than the development within the authoritarian mode are quite modest.

It is more important for the prediction that there are at least two major alternative scenarios of the possible role of revolutions in future.

First. Revolutions will hardly disappear, but their significance in terms of advancement will decrease even more. However, in future they may be quite numerous and engage influential nations and this in any case will strongly affect the destiny of many countries. Such revolutions appear an important factor of the World System's reconfiguration (see Grinin 2012b, 2018b; Grinin and Korotayev 2016a).

Moreover, in this case revolutions will be a kind of a ram destroying the old world-system/global order and preparing the ground for the establishment of a new world order. Second. The revolutions will not disappear, but their significance with respect to advancement seems doubtful. Most revolutions will probably take the existing patterns of 'color revolutions' or violent upheavals. But some may still produce considerable impacts on the World System and its large parts and consequently, on the global history. Since we expect a drastic transformation of the world order within the next decades it seems reasonable to suppose that this new order will be established via different means including revolutions. That is why the importance of revolutions as tools of progress may increase, especially if they occur in the USA or other Western countries (this becomes quite possible if the situation in the world changes dramatically). Moreover, revolutions in great powers like Russia and especially China will also strongly affect the World System and the future world order.

NOTES

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¹ About an unstable equilibrium resulting from a number of serious challenges in a society see Goldstone 2014. Many researchers also analyzed societies as systems whose adequate functioning depended on the maintained equilibrium of interchange of matter, energy and information between the system and its environment, as well as between subsystems constituting a system. Within this approach, researchers not without reason argued that any critical disturbance destroying this equilibrium leads a society to a state of imbalance (Hagopian 1974) or dysfunction (Johnson 1968), which brings a serious risk of revolutionary destabilization. Besides, within this approach there were proposed a number of 'candidates' that can become the forces leading social systems to dysfunction/destabilization, for example: an uneven impact of technological growth and modernization processes on the needs of different subsystems in resources and on their actual supply with these resources, changes in distribution of power between the elites of different subsystems (Jessop 1972), violent changes in value systems resulting from the emergence of new religions or ideologies (Johnson 1968) or just asynchrony of the changes in different subsystems (Hagopian 1974).

² For example, the reforms conducted in the fourteenth-century B.C. by Urningina who was probably elected the ruler of Lagash after the popular uprising (Dya-

konov 1951; 1983: 207–274; 2000: 55–56); about similar uprisings and the establishment of a peculiar form of government see also Shtyrbul 2006.

³ Among the Chinese popular uprisings the Taiping Rebellion of 1850–1864 is the most similar to revolution (see, *e.g.*, Ilyushechkin 1967).

⁴ Of course, we can denote it as a progressive development only in the final account (since revolutions proved to be a rather costly way of development and sometimes would temporarily throw society back). Moreover, we denote them in such a way also referring to the period up to the end of the nineteenth century (see below).

⁵ However, as we will see below, in the twentieth century due to the changing historical role of revolutions, the latter could bring a society to the non-mainstream path of development. Such paths were communism and fascism; the religious revolution in Iran can also be referred here.

⁶ Except for such revolutions as the plebian movements in ancient Rome.

⁷ Of most importance was the Mohamed revolution in the early seventh century AD.

⁸ The concept of modernization covers a wide range of subjects and its exact definition is disputable (Black 1966; Rostow 1971; Przeworski and Limongi 1997; Poberezhnikov 2006; Travin and Margania 2004; Grinin 2012c). About the connection between revolution and modernization see, *e.g.*, Huntington 1968; Hobsbawm 1996; Boix 2011; Grinin 2013, 2017a, 2018b.

⁹ Note that the third-generation revolutionary theorists (following Goldstone's terminology [2014]) started to pay great attention to the impact of external factors (especially wars) as triggers of revolutionary destabilization. Meanwhile, the fourth-generation revolutionary theorists put particular emphasis on the long-term impact of external factors (when, *e.g.*, military rivalry could force a state to actively extract resources from social system). By the way, this is the case of the exhausted USSR.

¹⁰ We do not consider here the nineteenth century revolutions in Latin America. But still we should note that since it was the World-System periphery the revolutions did not and could not lead to there any stable progressive outcome.

¹¹ To which we may also attribute the Meiji revolution in Japan in 1868.

¹² For example, in the USA industrialization with a high level of machines proceeded until the mid-nineteenth century and mostly relied not on the steam but on water energy which was abundant in the North America (see Grinin 2007; Grinin L. and Grinin A. 2015; Grinin and Korotayev 2015).

¹³ This conviction started to widely spread after the Great French Revolution. Starting from the second half of the nineteenth century it became a dominant idea in social philosophy especially after the spread of Herbert Spencer's evolutionary ideas (2000 [1862]; 1872). In the twentieth century this almost became a postulate in academic social studies (*e.g.*, Le Bon 1913; Adams 1913; Sorokin 1925; Edwards 1927; Pettee 1938; Brinton 1965 [1938]; Brogan 1952: 96; Carr 1955: 710; Wolfe 1965: 7; Berger and Neuhaus 1970: 53; Dunn 1972: 11–12; Boulding 1953: xiv; Ellul 1971: 39, 43).

¹⁴ In order to accomplish the goals set by a revolution there is often needed not one but two or more revolutions and often a whole revolutionary epoch during which both the goals and the society's mindset are modified.

¹⁵ By the way, this happened in many ways due to the fact that this was hardly the first revolution in this country and besides, they had a certain experience of democracy.

¹⁶ The divergence/convergence cycles (see Grinin and Korotayev 2016a).

REFERENCES

- Adams, B. 1913. *The Theory of Social Revolution*. New York: The Macmillan Company.
- Arjomand, S. A. 1992. Constitutions and the struggle for political order. *European Journal of Sociology* 33: 39–82.
- Arrighi, G. 1994. *The Long Twentieth Century: Money, Power, and the Origins of Our Times*. London: Verso.
- Black, C. E. 1966. *The Dynamics of Modernization: A Study in Comparative History*. New York: Harper & Row.
- Le Bon, G. 1913. *The Psychology of Revolutions*. New York: Ernest Benn.
- Berger, P., and Neuhaus, R. J. 1970. *Movement and Revolution*. N.Y.: Anchor Books Garden City.
- Boix, C. 2011. Democracy, Development, and the International System. *American Political Science Review* 105(4): 809–828.
- Boswell, T., and Chase-Dunn, Ch. 2000. *The Spiral of Capitalism and Socialism*. Boulder, CO: Lynne Rienner.
- Boulding, K. 1953. *The Organisational Revolution*. New York.
- Brinton, C. 1965. *The Anatomy of Revolution*. New York: Vintage.
- Braudel, F. 1985. *La dynamique du capitalisme*. Paris: Flammarion.
- Brogan, D. 1952. *The Price of Revolution*. London: Hamish Hamilton.
- Carr, L. 1955. *Analytical Sociology*. New York.
- Cartledge, P. 1998. *Kosmos. Essays in Order, Conflict and Community in Classical Athens*. Cambridge.
- Chase-Dunn, Ch., and Hall, T. D. 1997. *Rise and Demise: Comparing World-Systems*. Boulder, CO: Westview Press.
- Chase-Dunn, Ch., Niemeyer, R., Alvarez, A., Inoue, H., and Love, J. 2010. Cycles of Rise and Fall, Upsweeps and Collapses: Changes in the Scale of Settlements and Politics Since the Bronze Age. In Grinin, L. E., Herrmann, P., Korotayev, A. V., and Tausch, A. (eds.), *History and Mathematics: Processes and Models of Global Dynamics* (pp. 64–91). Volgograd: Uchitel.
- Colburn, F. D. 1994. *The Vogue of Revolution in Poor Countries*. Princeton: Princeton University Press.
- Dunn, J. 1989. *Modern Revolutions: An Introduction to the Analysis of a Political Phenomenon*. 2nd ed. Cambridge, New York: Cambridge University Press.
- Dyakonov, I. M. 1951. Urukagina's Reforms in Lagash. *Vestnik drevney istorii* 1: 15–32. *Original in Russian* (Дьяконов, И. М. Реформы Урукагины в Лагаше. *Вестник древней истории* 1: 15–32).
- Dyakonov, I. M. (ed.) 1983. *History of the Ancient East. The Origin of the Most Ancient Class Societies and the First Centres of the Slave-holding Formation*. Vol. 1. Moscow: Vostochnaya literatura. *Original in Russian* (Дьяконов, И. М. *История Древнего Востока. Зарождение древнейших классовых обществ и первые очаги рабовладельческой формации*. Т. 1. М.: Главная ред. вост. лит-ры).

- Edwards, L. P. 1927. *The Natural History of Revolution*. Chicago: University of Chicago Press.
- Eisenstadt, Sh. 1978. *Revolution and the Transformation of Societies: A Comparative Study of Civilizations*. New York: Free Press.
- Ellul, J. 1971. *Autopsy of Revolution*. New York.
- Frank, A. G., and Gills, B. K. (eds.) 1993. *The World System: Five Hundred Years of Five Thousand?* London: Routledge.
- Gellner, E. 1983. *Nations and Nationalism*. Oxford: Blackwell.
- Goldfrank, W. L. 1979. Theories of Revolution and Revolution Without Theory: The Case of Mexico. *Theory and Society* 7: 135–165.
- Goldstone, J. A. 1991. *Revolution and Rebellion in the Early Modern World*. Berkeley, CA: University of California Press.
- Goldstone, J. A. 2001. Toward a Fourth Generation of Revolutionary Theory. *Annual Review of Political Science* 4: 139–187.
- Goldstone, J. A. 2014. *Revolutions: A Very Short Introduction*. Oxford University Press.
- Goldstone, J. A., Gurr, T., Harff, B., Levy, M., Marshall, M., Surko, P., Unger, A., et al. 2001. *State Failure Task Force Phase III Report*. Sci. Appl. Int. Corp, McLean, VA.
- Goodwin, J., and Skocpol, T. 1989. Explaining Revolutions in the Contemporary Third World. *Politics & Society* 17(4): 489–507.
- Grinin, A., Grinin, L. 2015. The Cybernetic Revolution and Historical Process. *Social Evolution & History* 14 (1): 125–184.
- Grinin, L. E. 1997. Formations and Civilizations. Chapter 2. *Filosofiya i obshchestvo* 2: 5–89. *Original in Russian* (Гринин, Л. Е. Формации и цивилизации. Глава 2. Философия и общество 2: 5–89).
- Grinin, L. E. 2004a. Democracy and Early State. *Social Evolution & History* 3 (2): 93–149.
- Grinin, L. E. 2004b. Early State and Democracy. In Grinin, L. E., Carneiro, R. L., Bondarenko, D. M., Kradin, N. N., and Korotayev, A. V. (eds.), *The Early State, Its Alternatives and Analogues* (pp. 419–463). Volgograd: Uchitel.
- Grinin, L. E. 2006. *Productive Forces and Historical Process*. Volgograd: Uchitel. *Original in Russian* (Гринин, Л. Е. Производительные силы и исторический процесс. Москва: КомКнига).
- Grinin, L. E. 2007. Production Revolutions and Periodization of History: A Comparative and Theoretic-mathematical Approach. *Social Evolution & History* 6 (2): 75–120.
- Grinin, L. E. 2008. Early State, Developed State, Mature State: Statehood Evolutionary Sequence. *Social Evolution & History* 7 (1): 67–81.
- Grinin, L. E. 2010. *State and Historical Process. The Evolution of the Statehood: From an Early to a Mature State*. Moscow: KomKniga/URSS. *Original in Russian* (Гринин, Л. Е. Государство и исторический процесс: Эволюция государственности: От раннего государства к зрелому. Москва: Либроком).
- Grinin, L. E. 2011a. *The Evolution of Statehood. From Early State to Global Society*. Saarbrücken: Lambert Academic Publishing.

- Grinin, L. E. 2011b. Origin of Globalization: The World-System Analysis. *Vek globalizatsii* 1: 80–94. *Original in Russian* (Гринин Л. Е. Истоки глобализации: Мир-системный анализ. *Век глобализации* 1: 80–94).
- Grinin, L. E. 2012a. *Macrohistory and Globalization*. Volgograd: Uchitel.
- Grinin, L. E. 2012b. Arab Spring and Reconfiguration of the World-System. In Korotayev, A. V., Zinkina, Yu. V., and Khodunova, A. S. (eds.), *Systemic Monitoring of Global and Regional Risks* (pp. 188–223). Moscow: LIBRO-KOM/URSS. *Original in Russian* (Гринин, Л. Е. Арабская весна и реконфигурация Мир-Системы. В: Коротаев, А. В., Зинькина, Ю. В., Ходунов, А. С. (ред.), *Системный мониторинг глобальных и региональных рисков: Арабская весна 2011 года*, с. 188–223. М.: ЛКИ).
- Grinin, L. 2012c. State and Socio-Political Crises in the Process of Modernization. *Clodynamics: The Journal of Theoretical and Mathematical History* 3 (1): 124–157.
- Grinin, L. E. 2013. State and Crises in the Process of Modernization. *Filosofiya i obshchestvo* 3: 29–59. *Original in Russian* (Гринин, Л. Е. Государство и кризисы в процессе модернизации. *Философия и общество* 3: 29–59).
- Grinin, L. E. 2017a. The Russian Revolution and Traps of Modernization. *Polis. Politicheskie issledovaniya* 4: 138–155. *Original in Russian* (Гринин, Л. Е. Русская революция и ловушки модернизации. *Полис. Политические исследования* 4: 138–155).
- Grinin, L. E. 2017b. Revolutions. A Survey of the Five-Hundred Trend. *Istoricheskaya psikhologiya i sotsiologiya istorii* 2: 5–42. *Original in Russian* (Гринин, Л. Е. Революции. Взгляд на пятисотлетний тренд. *Историческая психология и социология истории* 2: 5–42).
- Grinin, L. E. 2018a. Revolutions, Historical Process and Globalization. *Vek globalizatsii* 4: 16–29. *Original in Russian* (Гринин, Л. Е. Революции, исторический процесс и глобализация. *Век глобализации* 4: 16–29).
- Grinin, L. E. 2018b. Revolutions and Historical Process. *Journal of Globalization Studies* 9 (2): 126–141.
- Grinin, L. E., and Grinin, A. L. 2015. *From Bifaces to Nanorobots. The World on the Way to the Epoch of Self-Regulating Systems (History of Technologies and Description of Their Future Development)*. Moscow: Moscow branch of Uchitel Publishing House. *Original in Russian* (Гринин, Л. Е., Гринин, А. Л. *От рубил до нанороботов. Мир на пути к эпохе самоуправляемых систем (история технологий и описание их будущего)*. М.: Московская редакция изд-ва «Учитель»).
- Grinin, L. E., and Grinin, A. L. 2016. *The Cybernetic Revolution and the Forthcoming Epoch of Self-Regulating Systems*. Moscow: Moscow Branch of the Uchitel Publishing House.
- Grinin, L. E., Grinin, A. L., and Korotayev, A. 2017. Forthcoming Kondratieff Wave, Cybernetic Revolution, and Global Ageing. *Technological Forecasting & Social Change* 115: 52–68.
- Grinin, L. E., and Korotayev, A. V. 2014. Origins of Globalization in the Framework of the Afroeurasian World-System History. *Journal of Globalization Studies* 5 (1): 32–64.
- Grinin, L. E., and Korotayev, A. V. 2015. *Great Divergence and Great Convergence. A Global Perspective*. New York: Springer.

- Grinin, L. E., and Korotayev, A. V. 2016a. *The Near East, India and China in Globalization Process*. Moscow: Moscow branch of Uchitel Publishing House. *Original in Russian* (Гринин, Л. Е., Коротаев, А. В. *Ближний Восток, Индия и Китай в глобализационных процессах*. М.: Московский филиал издательства «Учитель»).
- Grinin, L. E., and Korotayev, A. V. 2016b. MENA Region and the Possible Beginning of World System Reconfiguration. In Erdoğan, M. M., and Christiansen, B. (eds.), *Comparative Political and Economic Perspectives on the MENA Region* (pp. 28–58). Hershey PA: Information Science Reference, An Imprint of IGI Global.
- Grinin, L. E., Korotayev, A. V. 2018. Origins of Globalization in the Framework of the Afroeurasian World-System History. In Hall, T. D. (ed.), *Comparing Globalizations, World-Systems Evolution and Global Futures* (pp. 37–70). https://doi.org/10.1007/978-3-319-68219-8_3. Springer.
- Hagopian, M. 1974. *The Phenomenon of Revolution*. New York: Dodd, Mead.
- Halliday, F. 1999. *Revolution & World Politics*. London: Macmillan.
- Hansen, M. N. 1989. *Was Athens a Democracy?* Copenhagen: Munksgaard.
- Hobsbawm, E. 1996. *The Age of Revolution: Europe 1789–1848*. Vintage.
- Huntington, S. 1968. *Political Order in Changing Societies*. New Haven and London: Yale University Press.
- Huntington, S. 1991. *The Third Wave. Democratization in the Late Twentieth Century*. Norman and London: University of Oklahoma Press.
- Huntington, S. P. 1996. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster.
- Johnson, Ch. 1968. *Revolutionary Change*. London: University of London Press.
- Johnson, V. 1993. The Structural Causes of Anticolonial Revolutions in Africa. *Alternatives* 18: 201–227.
- Ilyushechkin, V. P. 1967. *The Peasant War of the Taipins*. Moscow: Nauka. *Original in Russian* (Илюшечкин, В. П. *Крестьянская война тайпинов*. М.: Наука).
- Katz, M. 1997. *Revolutions and Revolutionary Waves*. New York: St. Martin's.
- Marx, K. 1964. *The Class Struggles in France*. New York: International Publishers.
- Mau, V., and Starodubrovskaya, I. 2001. *The Challenge of Revolution: Contemporary Russia in Historical Perspective*. Oxford: Oxford University Press.
- Pastor, R. 2001. Preempting Revolutions: The Boundaries of US Influence. In Katz, M. (ed.), *Revolution: International Dimension* (pp. 169–197). Washington, DC: Congr. Q.
- Pettie, G. 1938. *The Process of Revolution*. New York.
- Poberezhnikov, I. V. 2006. *The Transition from Traditional to Industrial Society*. Moscow: Rossper. *Original in Russian* (Побережников, И. В. *Переход от традиционного к индустриальному обществу*. Москва: РОССПЭН).
- Przeworski, A., and Limongi, F. 1997. Modernization: Theories and Facts. *World Politics* 49: 155–183.
- Rostow, W. 1971. *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge University Press, Cambridge.
- Sanderson, S. K. 2005. *Revolutions: A Worldwide Introduction to Political and Social Change*. Boulder: Paradigm Publishers.

- Semyonov, Yu. I., Gobozov, I. A., and Grinin, L. E. 2007. *Philosophy of History: Problems and Prospects*. Moscow: KomKniga. *Original in Russian* (Семёнов, Ю. И., Гобозов, И. А., Гринин, Л. Е. *Философия истории: Проблемы и перспективы*. Москва: КомКнига).
- Shtyrbul, A. A. 2006. *The Stateless Societies in the Stateless Epoch (3rd millennium BC – 2nd millennium AD)*. Omsk: Izd-vo Omskogo gosudarstvennogo pedagogicheskogo universiteta. *Original in Russian* (Штырбул, А. А. *Безгосударственные общества в эпоху государственности (III тыс. до н.э. – II тыс. н.э.)*. Омск: Изд-во Омского государственного университета).
- Skocpol, T. 1979. *States and Social Revolutions*. Cambridge, UK; Cambridge University Press.
- Skocpol, T., and Trimberger, E. K. 1994. Revolutions and the World-historical Development of Capitalism. In Skocpol, T. (ed), *Social Revolutions in the Modern World* (pp. 120–132). Cambridge: Cambridge University Press.
- Snyder, R. S. 1999. The U.S. and Third World revolutionary states: understanding the break-down in relations. *International Studies Quarterly* 43: 265–290.
- Sorokin, P. A. 1925. *The Sociology of Revolution*. Philadelphia.
- Sorokin, P. A. 1992. The Sociology of Revolution. In Sorokin, P. A. (ed.), *Humans, Civilizations, and Society* (pp. 266–294). Moscow. *Original in Russian* (Сорокин, П. А. Социология революции. В: Сорокин, П. А. (ред.), *Человек, Цивилизации, Общество*. Москва).
- Sorokin, P. A. 1994. Famine and Ideology of Society. In Sorokin, P. A. (ed.), *A Comprehensive Manual of Sociology* (pp. 367–395). Moscow: Nauka. *Original in Russian* (Сорокин, П. А. Голод и идеология общества. В: Сорокин, П. А. (ред.), *Общедоступный учебник социологии*. Москва).
- Spencer, H. 1972. *On Social Evolution: Selected Writings*. Chicago: University of Chicago Press.
- Spencer, H. 2000 [1862]. *First principles*. Chestnut Hill, MA: Adamant Media Corporation.
- De Tocqueville, A. 2010 [1856]. *The Old Regime and the French Revolution*. Transl. by John Bonner. New York: Dover Publications, Inc., Mineola.
- Travin, D., and Margania, O. 2004. *The European Modernization*. Book 1. Moscow: AST, Terra Fantastica. *Original in Russian* (Травин, Д., Маргания, О. *Европейская модернизация*. Книга 1. Москва: АСТ, Терра Фантастика).
- Tilly, Ch. 1993. *European Revolutions, 1492–1992*. Cambridge: Blackwell.
- Weber, M. 1930 [1904]. *The Protestant Ethic and the Spirit of Capitalism*. New York: The Citadel Press.
- Wickham-Crowley, T. 1992. *Guerrillas and Revolution in Latin America*. Princeton, NJ: Princeton University Press.
- Wolfe, B. 1965. *Ideology in Power. Reflections on Russian Revolution*. N.Y.

Table

Correlation between the types of revolutions, historical process and globalization

Type of socio-spatial links	Time period	Forms of political organization	Level of technology (production principles and production revolutions)	The predominating type of revolution	Role of revolutions in historical process	Role of revolutions in globalization
Local links	Prior to the seventh – the sixth millennia BCE	Pre-state (simple and medium complexity) political forms	Hunter-gatherer production principle, beginning of the agrarian production principle	No	No	No
Regional links	From the seventh – the sixth millennia BCE to the second half of the 4th millennium BCE	Pre-state political forms of medium complexity and the first complex polities		No or unrevealed	No or unrevealed	No or unrevealed
Regional and continental links	The second half of the fourth millennium BCE – the second half of the first millennium BCE	Early states and their analogues; the first empires	The second phase of the agrarian revolution; agrarian production principle reaches its maturity	Early polis, socialist or national-liberation	Relatively small ⁶	
Continental and trans-continental links	The second half of the first millennium BCE – the late fifth century CE	Rise of empires and first developed states	Final phase of the agrarian production principle	Polis, early religious and national liberation	Relatively small ⁷	Minor

Type of socio-spatial links	Time period	Forms of political organization	Level of technology (production principles and production revolutions)	The predominating type of revolution	Role of revolutions in historical process	Role of revolutions in globalization
Intercontinental (oceanic) links	From the sixteenth to the early nineteenth centuries (\approx 1492–1821)	Rise of developed states, first mature states	The first phase of the industrial production principle and industrial revolution	Religious, early anti-monarchist	Revolutions become the most important driving force of historical process	Significant
Global links	From the early nineteenth century to the 1960s – 1970s	Mature states and early forms of supranational entities	The second phase of the industrial revolution and the final phase of the industrial production principle	Democratic, national-liberation and communist	Starting from the mid nineteenth century, the progressive role of revolutions decreases. Reforms and deliberate transformations become the driving forces of historical process	Significant role until the third decade of the twentieth century. It becomes ambiguous and sometimes counter-productive
Planetary links	The last third of the twentieth to the twenty-first centuries; especially vivid will become in the forthcoming decades – by the mid twenty-first century	Formation of supranational entities, weakening of state sovereignty and struggle around sovereign rights, search for new types of political unions and entities, planetary	The start and development of scientific information revolution whose second phase is forecasted for the 2030s and 2040s	Anti-socialist, 'color' inspired by geopolitical actors	The role of revolutions continue to decrease	Declining role of revolutions in globalization as well

Source: Grinin and Korotayev 2014, 2018; Grinin 2019